



#### **CERTIFICATE OF MAILING**

I hereby certify that this paper, together with all enclosures identified herein, are being deposited with the United States Postal Service as first class mail, addressed to the Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date indicated below.

November 9, 2005

Melanie S. Jernberg

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Art Unit

3661

Examiner

Olga Hernandez

**Applicant** 

Jan Ryderstam et al.

Appln. No.

10/694,167

Filing Date

October 27, 2003

Confirmation No.

3060

For

TRACTIVE FORCE MAP

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450

# TRANSMITTAL OF APPEAL BRIEF (PATENT APPLICATION - 37 CFR §41.37)

- 1. Transmitted herewith is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on September 14, 2005.
  - 2. STATUS OF APPLICANTS

This application is on behalf of:

X other than a small entity.

\_\_\_ a small entity.

3. FEE FOR FILING APPEAL BRIEF

Pursuant to 35 USC §41(a)(6), the fee for filing the Appeal Brief is:

small entity

\$250.00

X other than a small entity

\$500.00

Appeal Brief fee due: \$500.00

Applicant Appln. No.		Jan Ryderstam et al. 10/694,167		
Page	:	2		
4.	EXTENSION OF TERM			
	The proceedings herein are for a patent application and the provisions of 35 USC			
§41(a)(8) apply.				
(complete (a) or (b), as applicable)				
	(a) Applicant petitions for an extension of time under 37 CFR §1.136:			
		Extension	Fee for other than	Fee for
		(months)	small entity	small entity
		one month	\$120.00	\$60.00
		two months	\$450.00	\$225.00
		three months	\$1020.00	\$510.00
		four months	\$1590.00	\$795.00
		five months	\$2160.00	\$1080.00
	FEE: \$			
If an additional extension of time is required, please consider this a petition therefor.				
(check and complete the next item, if applicable)				
	(b) X Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.			
5.	TOTAL FEE DUE  The total fee due is:			
	Appeal Brief fee:		\$500.00	
	Extension fee (if any) \$		\$500.00	
		TOTAL FEE DUE:	\$500.00	
6.	FEE P.	AYMENT		
	_	Attached is a check in	the sum of \$	
	X Charge Account No. 06-1510 the sum of \$500.00.			

A duplicate of this transmittal is attached.

Jan Ryderstam et al.

Appln. No.

10/694,167

Page

3

# 7. FEE DEFICIENCY

:

X If any additional extension and/or fee is required, this is a request therefor and to charge Account No. 06-1510.

and/or

X If any additional fee for claims is required, charge Account No. 06-1510.

Respectfully submitted,

Date

\_

Marcus P. Dolce, Registration No. 46 073

Price, Heneveld, Cooper, DeWitt & Litton, LLP

695 Kenmoor, S.E. Post Office Box 2567

Grand Rapids, Michigan 49501

(616) 949-9610

MPD/msj

NOV 1 4 2005

Atty. Docket No. 81044557 (201-0705)

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Art Unit

: 3661

Examiner

Olga Hernandez

Applicant

Jan Ryderstam et al.

Appln. No.

10/694,167

Filing Date

October 27, 2003

Confirmation No.

3060

For

TRACTIVE FORCE MAP

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

# APPEAL BRIEF (37 CFR §41.37)

This brief is in furtherance of the Notice of Appeal filed in this case on September 14, 2005.

The fees required under 35 USC 41(a)(6), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains these items under the following headings, and in the order set forth below (37 CFR §41.37(c)):

- I. Real Party in Interest
- II. Related Appeals and Interferences
- III. Status of Claims
- IV. Status of Amendments
- V. Summary of Claimed Subject Matter
- VI. Grounds of Rejection to Be Reviewed on Appeal
- VII. Argument
- VIII. Conclusion

Appendix of Claims Involved in the Appeal

Evidence Appendix

11/14/2005 NNGUYEN1 00000038 061510 10694167

Related Proceedings Appendix

01 FC:1402

500.00 DA

Jan Ryderstam et al.

Appln. No.

10/694,167

Page

•

The final page of this brief bears the attorney's signature.

I. Real Party in Interest

The real party in interest in this application is Ford Global Technologies, Inc. The assignment from the inventors to Ford Motor Company was recorded on October 27, 2003 at Reel 014649, Frame 0451. The assignment from Ford Motor Company to Ford Global

Technologies, Inc. was recorded on October 27, 2003 at Reel 014649, Frame 0406.

II. Related Appeals and Interferences

There are no related appeals or interferences pending during this application.

III. Status of Claims

Claims 1-20 are pending in this application. Claims 6, 7, 9-12 and 16-20 have been

indicated as being allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims. As discussed below, an Amendment After Appeal is

being filed contemporaneously with this Appeal Brief wherein claims 6, 9-12 and 16-19 were

rewritten into independent form. Claims 7 and 20 depend from claims 6 and 19, respectively.

Accordingly, claims 6, 7, 9-12 and 16-20 are now believed to be allowed. Claims 1-5, 8 and 13-

15 are the subject of this appeal.

IV. Status of Amendments

An Amendment After Appeal is being filed contemporaneously with this Appeal Brief, in

which claims 6, 9-12 and 16-19 were amended to be in independent form.

V. Summary of Claimed Subject Matter

As described in the specification portion of the application ( $\P$  1-19), and illustrated in

the related figures (FIGS. 1-3), the invention recited in the finally rejected claims relates to a

tractive force map and a method of controlling tractive force of a vehicle.

Jan Ryderstam et al.

Appln. No. :

10/694,167

Page

1

One aspect of the present invention is to provide a method 24 of controlling tractive force of a vehicle 10 comprising determining a tractive force request 50 of a driver of the vehicle 10, determining an actual tractive force 52 of the vehicle 10, and modifying the actual tractive force of the vehicle to be equal to the tractive force request 54.

Another aspect of the present invention is to provide a method 24 of controlling tractive force of a vehicle 10 comprising measuring an actual speed of the vehicle 10 and sensing a position of an acceleration pedal 22. The method also includes looking up the tractive force request on a map (FIG. 3) corresponding to the actual speed and the position of the acceleration pedal 22. The method further includes modeling the actual tractive force of the vehicle and modifying the actual tractive force of the vehicle to be equal to the tractive force request.

# VI. Grounds of Rejection to Be Reviewed on Appeal

Claims 1-5, 8 and 13-15 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,528,959 to Kitano et al. (hereinafter referred to as "the Kitano et al. '959 patent").

#### VII. Argument

A. Rejection of Claims 1-5, 8 and 13-15 under 35 U.S.C. §102(e) as Being Anticipated by U.S. Patent No. 6,528,959 to Kitano et al.

Claims 1-5, 8 and 13-15 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,528,959 to Kitano et al. "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of anticipation based upon the prior art. In re Sun, 31 U.S.P.Q.2d 1451, 1453 (Fed. Cir. 1993) (unpublished). The Examiner has not created a prima facie case of anticipation to reject claims 1-5, 8 and 13-15.

Jan Ryderstam et al.

Appln. No.

10/694,167

Page

4

#### Claims 1 and 2

Claim 1 defines a method of controlling tractive force of a vehicle comprising determining a tractive force request of a driver of the vehicle, determining an actual tractive force of the vehicle, and modifying the actual tractive force of the vehicle to be equal to the tractive force request.

The prior art of record does not disclose or suggest the above noted features of claim 1. According to the Office Action:

Kitano discloses determining a tractive force request of a driver of the vehicle; determining an actual tractive force of the vehicle; and modifying the actual tractive force of the vehicle to be equal to the tractive force request (column 3, lines 35-48, column 7, lines 18-24, 57-67 and figures 2, 3, 29).

However, the portions of the Kitano et al. '959 patent pointed out in the Office Action did not disclose the claimed features and Applicants submit that Kitano et al. '959 patent does not disclose the current features anywhere in the patent.

The Kitano et al. '959 patent is drawn to a vehicle having front wheels driven by an engine and rear wheels driven by a separate electric motor. The control system for the vehicle preserves driving stability of a vehicle when the vehicle is traveling on a low-friction surface and when the vehicle is turning and also allows the electric motor to be driven without developing a torque step when the vehicle is accelerated. However, the Kitano et al. '959 patent does not disclose modifying an actual tractive force of the vehicle to be equal to a tractive force request.

The Office Action first cites lines 35-48 of column 3 of the Kitano et al. '959 patent for including the features of claim 1. Lines 35-48 of column 3 of the Kitano et al. '959 patent state that the driving force control system of the Kitano et al. '959 patent includes:

driving force demand degree-detecting means for detecting a degree of demand for a driving force for driving the vehicle;

target driving force-calculating means for calculating a target driving force for driving the vehicle, based on at least the vehicle speed and the degree of demand for the driving force;

traveling condition-determining means for determining a present traveling condition of the vehicle; and

driving force control means for controlling a driving force of the engine

Applicant: Jan Ryderstam et al.

Appln. No. : 10/694,167

Page: 5

and a driving force of the electric motor based on the calculated target driving force, in dependence on the traveling condition of the vehicle determined by the traveling condition-determining means.

Therefore, this cited section discloses that the driving force control means for controlling the driving force of the engine and a driving force of the electric motor are dependent on the traveling condition of the vehicle as determined by the traveling condition-determining means of the system. However, this cited section does not include determining an actual tractive force of the vehicle or modifying an actual tractive force of the vehicle to be equal to a tractive force request. Applicant notes that the traveling condition-determining means for determining a present traveling condition of the vehicle in this cited section refers to whether the vehicle is in a forward drive mode, a reverse drive mode, a forward decelerating regeneration mode, a reverse decelerating regeneration mode or a stoppage mode, as outlined in lines 1-21 of column 13 of the Kitano et al. '959 patent. Therefore, this cited section does not disclose determining an actual tractive force of a vehicle or modifying an actual tractive force of a vehicle to be equal to a tractive force request.

The Office Action also cites lines 18-24 of column 7 of the Kitano et al. '959 patent. Lines 18-24 of column 7 of the Kitano et al. '959 patent state that:

according to the preferred embodiment, when the released condition of the accelerator pedal is detected, the engine braking force is calculated according to the detected vehicle speed, and the target braking force of the electric motor is set to a value equal to the calculated engine braking force, whereby the behavior of the vehicle in decelerating travel by release of the accelerator pedal can be stabilized.

However, this cited paragraph refers to setting the braking force of an electric motor 4 controlling rear wheels WRR and WRL of a vehicle 2 when the vehicle 2 has an engine braking force of the engine 3. Accordingly, this section does not refer to determining a tractive force request of a driver of a vehicle, determining an actual tractive force of the vehicle and modifying the actual tractive force of the vehicle to be equal to the tractive force request.

Applicant: Jan Ryderstam et al.

Appln. No. : 10/694,167

Page: 6

The Office Action has also cited lines 57-67 of column 7 of the Kitano et al. '959 patent. Lines 57-67 of column 7 of the Kitano et al. '959 patent are drawn to the third object of the disclosed system. According to the Kitano et al. '959 patent:

It is a third object of the invention to provide a driving force control system for a front-and-rear wheel drive vehicle that enables the assistance of an electric motor to be smoothly performed without developing a torque step when the vehicle is accelerated, thereby ensuring an excellent acceleration and drivability.

Lines 20-25 of column 3. Therefore, according to the Kitano '959 patent, lines 56-67 of column 7 are drawn to using the system to obtain the objective of assisting an electric motor as a drive source for left and right rear wheels. However, lines 57-67 of column 7 do not refer to determining an actual tractive force of a vehicle or modifying the actual tractive force of the vehicle to be equal to the tractive force request of a driver of the vehicle. This quoted section is only drawn to driving the electric motor 4, not the actual drive force of a vehicle.

Finally, Figs. 2, 3 and 29 of the Kitano et al. '959 patent are drawn to a flow chart of a main flow of a driving force control process, a flow chart of a subroutine for a driving force-calculating process, and a flow chart of a target rear-wheel driving force-calculating subroutine, which is executed by a driving force control system according to a third embodiment of the invention, respectively. Therefore, Figs. 2 and 3 are for the first embodiment of the invention and Fig. 29 is the third embodiment of the invention.

Nevertheless, none of these figures and related description disclose modifying an actual tractive force of a vehicle to be equal to a tractive force request of a driver of a vehicle.

Accordingly, nowhere in the sections cited by the Office Action or in the Kitano et al. '959 patent is disclosed modifying a tractive force of a vehicle to be equal to a tractive force request of a driver of a vehicle. The Kitano et al. '959 patent does not disclose modifying "the 'real' tractive force" to be equal to a "'target' driving force" as set forth in the Office Action. Accordingly, claim 1 is in condition for allowance.

Furthermore, claim 2 depends from claim 1, and since claim 1 defines unobvious patentable subject matter, claim 2 defines patentable subject matter.

Applicant: Jan Ryderstam et al.

Appln. No. : 10/694,167

Page: 7

# Claim 3

Claim 3 depends from claim 1 and further defines the step of determining the actual tractive force as comprising modeling the actual tractive force. The prior art of record does not disclose or suggest the above noted features of claim 3. First, claim 3 depends from claim 1, and since claim 1 defines unobvious patentable subject matter as discussed above, claim 3 defines patentable subject matter. Second, the prior art of record does not disclose or suggest all of the above noted features of claim 3. According to the final Office Action, the Kitano et al. '959 patent discloses modeling an actual tractive force in the abstract. However, the abstract of the Kitano et al. '959 patent only refers to calculating a target driving force and determining a present traveling condition of a vehicle. However, as outlined in lines 1-20 of column 15 of the Kitano et al. '959 patent, the present traveling condition of the vehicle is either a forward drive mode, a reverse drive mode, a forward deceleration regeneration mode, a reverse deceleration regeneration mode or a stoppage mode. None of these determine an actual tractive force of a vehicle by modeling an actual tractive force. Accordingly, claim 3 is in condition for allowance.

#### Claim 4

Claim 4 depends from claim 3 and further defines the step of modeling the actual tractive force as comprising modeling the actual tractive force as a function of at least one of vehicle speed, engine speed, engine temperature, transmission temperature and ambient temperature. The prior art of record does not disclose or suggest the above noted features of claim 4. First, claim 4 depends from claims 3 and 1, and since claims 3 and 1 define patentable subject matter as discussed above, claim 4 defines patentable subject matter.

Second, contrary to the final Office Action, the Kitano et al. '959 patent does not disclose or suggest modeling an actual tractive force as a function of the vehicle speed in the abstract.

According to the abstract, "[t]he target driving force for driving the vehicle is calculated based on at least a vehicle speed and an acceleration pedal opening." However, this phrase does not refer to the actual tractive force of the vehicle. Accordingly, claim 4 is in condition for allowance.

Applicant : Jan Ryderstam et al.

Appln. No. : 10/694,167

Page: 8

# Claim 5

Claim 5 depends from claim 4 and further defines the tractive force request as comprising a request for a percentage of maximum available tractive force of the vehicle. The prior art of record does not disclose or suggest the above noted features of claim 5. First, claim 5 depends from claims 4, 3 and 1, and since claims 4, 3 and 1 define patentable subject matter as discussed above, claim 5 defines patentable subject matter. Second, the Kitano et al. '959 patent does not disclose or suggest a tractive force request that comprises a request for a percentage of maximum available tractive force of the vehicle as set forth in the Office Action. In rejecting claim 5, the final Office Action has cited lines 1-15 of column 41 of the Kitano et al. '959 patent. However, this section only refers to a target driving force for the electric motor 4 for driving the rear wheels of the vehicle. This is not a percentage of maximum available tractive force of the vehicle. Accordingly, claim 5 is in condition for allowance.

# Claim 8

Claim 8 depends from claim 1, and further defines the tractive force request as comprising a request for a percentage of maximum available tractive force of the vehicle. The prior art of record does not disclose or suggest the above noted features of claim 8. First, claim 8 depends from claim 1, and since claim 1 defines unobvious patentable subject matter as discussed above, claim 8 defines patentable subject matter. Second, as discussed above in regard to claim 5, the Kitano et al. '959 patent does not disclose or suggest a tractive force request that comprises a request for a percentage of maximum available tractive force of a vehicle as set forth in the final Office Action. Accordingly, claim 8 is in condition for allowance.

#### Claim 13

Claim 13 defines a method for controlling tractive force of a vehicle including, among other things, a method of controlling tractive force of a vehicle comprising measuring an actual speed of the vehicle, sensing a position of an acceleration pedal, looking up the tractive force request on a map corresponding to the actual speed and the position of the acceleration pedal,

Applicant : Jan Ryderstam et al.

Appln. No. : 10/694,167

Page: 9

modeling the actual tractive force of the vehicle and modifying the actual tractive force of the vehicle to be equal to the tractive force request.

The prior art of record does not disclose or suggest the above noted features of claim 13. Specifically, as discussed above regarding claim 1, the Kitano et al. '959 patent does not disclose modifying an actual tractive force of a vehicle to be equal to a tractive force request. The Kitano et al. '959 patent does not disclose modifying "the 'real' tractive force" to be equal to a "'target' driving force" as set forth in the Office Action. Furthermore, as discussed above in regard to claim 3, contrary to the final Office Action, the abstract of the Kitano et al. '959 patent does not disclose or suggest modeling an actual tractive force of a vehicle.

Accordingly, claim 13 is in condition for allowance.

#### Claim 14

Claim 14 depends from claim 13 and further defines the step of modeling the actual tractive force as comprising modeling the actual tractive force as a function of at least one of vehicle speed, engine speed, engine temperature, transmission temperature and ambient temperature. The prior art of record does not disclose or suggest the above noted features of claim 14. First, claim 14 depends from claim 13, and since claim 13 defines unobvious patentable subject matter as discussed above, claim 14 defines patentable subject matter. Second, as discussed above in regard to claim 4, the abstract does not disclose or suggest modeling an actual tractive force as a function of vehicle speed. Accordingly, claim 14 is in condition for allowance.

#### Claim 15

Claim 15 depends from claim 13, and further defines the tractive force request as comprising a request for a percentage of maximum available tractive force of the vehicle. The prior art of record does not disclose or suggest the above noted features of claim 15. First, claim 15 depends from claim 13, and since claim 13 defines unobvious patentable subject matter as discussed above, claim 15 defines patentable subject matter. Second, as discussed above in regard to claims 5 and 8, the Kitano et al. '959 patent does not disclose a tractive

Jan Ryderstam et al.

Appln. No.

10/694,167

Page

10

force request as comprising a request for a percentage of maximum available tractive force of a vehicle in lines 1-15 of column 41 of the Kitano et al. '959 patent. Accordingly, claim 15 is in condition for allowance.

#### VIII. Conclusion

Each appealed claim is definite and recites features that are not disclosed in any of the cited references and it would not have been obvious to modify the cited references to include the recited features of the appealed claims. The reference upon which the Examiner relies in the Examiner's rejection of the twice rejected claims does not disclose or suggest a method as claimed. Applicant's invention resolves problems and inconveniences experienced in the prior art, and therefore represents a significant advancement in the art. Applicant earnestly requests that the Examiner's rejection of claims 1-5, 8 and 13-15, inclusive, be reversed, and that the application be passed to issuance forthwith.

Respectfully submitted,

Date

Marcus P. Dolce, Registration No. 46 073

Price, Heneveld, Cooper, DeWitt & Litton, LLP

695 Kenmoor, S.E.

Post Office Box 2567

Grand Rapids, Michigan 49501

(616) 949-9610

MPD/msj



# Appendix of Claims (35 USC §41.37(c)

- A method of controlling tractive force of a vehicle comprising:
   determining a tractive force request of a driver of the vehicle;
   determining an actual tractive force of the vehicle; and
   modifying the actual tractive force of the vehicle to be equal to the tractive force
  request.
- 2. The method of controlling tractive force of claim 1, wherein: the step of determining the tractive force request comprises: measuring an actual speed of the vehicle; sensing a position of an acceleration pedal; looking up the tractive force request on a map corresponding to the actual speed and the position of the acceleration pedal.
- 3. The method of controlling tractive force of claim 1, wherein: the step of determining the actual tractive force comprises: modeling the actual tractive force.
- 4. The method of controlling tractive force of claim 3, wherein:
  the step of modeling the actual tractive force comprises:
  modeling the actual tractive force as a function of at least one of the following:
  vehicle speed, engine speed, engine temperature, transmission temperature and ambient temperature.
- 5. The method of controlling tractive force of claim 4, wherein:
  the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle.

6. A method of controlling tractive force of a vehicle comprising: determining a tractive force request of a driver of the vehicle; determining an actual tractive force of the vehicle; and modifying the actual tractive force of the vehicle to be equal to the tractive force request;

wherein the step of determining the actual tractive force comprises modeling the actual tractive force;

wherein the step of modeling the actual tractive force comprises modeling the actual tractive force as a function of at least one of the following:

vehicle speed, engine speed, engine temperature, transmission temperature and ambient temperature;

wherein the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle; and

wherein the percentage of available tractive force is negative when the acceleration pedal is not being depressed and the vehicle is moving, thereby decelerating the vehicle.

- 7. The method of controlling tractive force of claim 6, wherein:
  the request for the percentage of available tractive force decreases for a given acceleration pedal position as the speed of the vehicle increases.
- 8. The method of controlling tractive force of claim 1, wherein:
  the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle.
- 9. A method of controlling tractive force of a vehicle comprising: determining a tractive force request of a driver of the vehicle; determining an actual tractive force of the vehicle; and

modifying the actual tractive force of the vehicle to be equal to the tractive force request;

wherein the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle; and

wherein the percentage of available tractive force is negative when the acceleration pedal is not being depressed, thereby decelerating the vehicle when the vehicle has a positive velocity.

10. A method of controlling tractive force of a vehicle comprising: determining a tractive force request of a driver of the vehicle; determining an actual tractive force of the vehicle; and modifying the actual tractive force of the vehicle to be equal to the tractive force request;

wherein the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle; and

wherein the request for the percentage of available tractive force decreases for a given acceleration pedal position as the speed of the vehicle increases.

11. A method of controlling tractive force of a vehicle comprising:

determining a tractive force request of a driver of the vehicle;

determining an actual tractive force of the vehicle; and

modifying the actual tractive force of the vehicle to be equal to the tractive force request;

wherein the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle; and

wherein the request for the percentage of available tractive force increases as a function of a positive rate of change of the acceleration pedal position.

12. A method of controlling tractive force of a vehicle comprising:

determining a tractive force request of a driver of the vehicle;

determining an actual tractive force of the vehicle; and

modifying the actual tractive force of the vehicle to be equal to the tractive force request;

wherein the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle; and

wherein the request for the percentage of available tractive force decreases as a function of a negative rate of change of the acceleration pedal position.

13. A method of controlling tractive force of a vehicle comprising: measuring an actual speed of the vehicle; sensing a position of an acceleration pedal;

looking up the tractive force request on a map corresponding to the actual speed and the position of the acceleration pedal;

modeling the actual tractive force of the vehicle;

modifying the actual tractive force of the vehicle to be equal to the tractive force request.

- 14. The method of controlling tractive force of claim 13, wherein:
  the step of modeling the actual tractive force comprises:
  modeling the actual tractive force as a function of at least one of the following:
  vehicle speed, engine speed, engine temperature, transmission temperature and ambient temperature.
- 15. The method of controlling tractive force of claim 13, wherein:
  the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle.

16. A method of controlling tractive force of a vehicle comprising:

measuring an actual speed of the vehicle;

sensing a position of an acceleration pedal;

looking up the tractive force request on a map corresponding to the actual speed and the position of the acceleration pedal;

modeling the actual tractive force of the vehicle; and

modifying the actual tractive force of the vehicle to be equal to the tractive force request;

wherein the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle; and

wherein the percentage of available tractive force is negative when the acceleration pedal is not being depressed and the vehicle is moving, thereby decelerating the vehicle when the vehicle has a positive velocity.

17. A method of controlling tractive force of a vehicle comprising:

measuring an actual speed of the vehicle;

sensing a position of an acceleration pedal;

looking up the tractive force request on a map corresponding to the actual speed and the position of the acceleration pedal;

modeling the actual tractive force of the vehicle; and

modifying the actual tractive force of the vehicle to be equal to the tractive force request;

wherein the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle; and

wherein the request for the percentage of available tractive force decreases for a given acceleration pedal position as the speed of the vehicle increases.

## 18. A method of controlling tractive force of a vehicle comprising:

measuring an actual speed of the vehicle;

sensing a position of an acceleration pedal;

looking up the tractive force request on a map corresponding to the actual speed and the position of the acceleration pedal;

modeling the actual tractive force of the vehicle; and

modifying the actual tractive force of the vehicle to be equal to the tractive force request;

wherein the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle; and

wherein the request for the percentage of available tractive force increases as a function of a positive rate of change of the acceleration pedal position.

### 19. A method of controlling tractive force of a vehicle comprising:

measuring an actual speed of the vehicle;

sensing a position of an acceleration pedal;

looking up the tractive force request on a map corresponding to the actual speed and the position of the acceleration pedal;

modeling the actual tractive force of the vehicle; and

modifying the actual tractive force of the vehicle to be equal to the tractive force request;

wherein the tractive force request comprises a request for a percentage of maximum available tractive force of the vehicle; and

wherein the request for the percentage of available tractive force decreases as a function of a negative rate of change of the acceleration pedal position.

20. The method of controlling tractive force of claim 19, wherein: the request for the percentage of available tractive force increases as a function of a positive rate of change of the acceleration pedal position.

# Evidence Appendix (35 USC §41.37(c))

There are no related appeals or interferences pending during this application.

# Related Proceedings Appendix (35 USC §41.37(c))

There was no evidence submitted during this application under 37 CFR §1.130, 1.131 or 1.132 or any evidence entered by the Examiner and replied upon by Appellant in the appeal.